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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,752	09/03/2004	Yoshihiro Kato	09792909-5984	7054

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EXAMINER

NGUYEN, TRAM HOANG

ART UNIT PAPER NUMBER

2818

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/506,752	KATO ET AL.	
	Examiner	Art Unit	
	Tram H. Nguyen	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 3-5, 9, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

New Grounds of Rejection

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 6,8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma et al. (US Pat 2004/0043516) (hereinafter Sharma).

Regarding to **claim 1**, Sharma discloses a magnetic memory device constructed as magnetization random access memory, said magnetic memory device (reference numeral 120) comprising: a memory element having by laminating a magnetization pinned layer in which the orientation of magnetization is pinned (par. [0046], lines 3-4) and a magnetic layer (reference numeral 26-0) in which the orientation of magnetization is changeable (par. [0046], lines 4-5), and a magnetic shield layer (reference numeral 510) for magnetically shielding said memory element (par. [0084], lines 2-4), said memory element disposed in a position inward from an edge portion said magnetic shield layer toward center portion of said magnetic shield layer, and outward from said center portion toward said edge portion (fig. 5F).

Regarding to **claim 2**, Sharma discloses a magnetic memory device comprising: a memory element (reference numeral 120) having a magnetic layer (reference numeral 260) capable of being magnetized, and a magnetic shield layer (reference numeral 510) for magnetically shielding said memory element, said memory element disposed in a position inward from an edge portion of said magnetic shield layer toward a center portion of said magnetic shield layer, and outward from said center portion toward said edge portion (fig. 5F).

Regarding to **claim 6**, Sharma discloses all the limitations of the claimed invention for the same reasons are set-forth above; furthermore, fig. 5E shows the magnetic shield layer is disposed on the top and bottom of a package having by sealing said memory element therein, and on the upper portion and the lower portion of said memory element within said package.

Regarding to **claim 8**, Sharma discloses all the limitations of claimed invention for the same reasons are set-forth above; moreover, Sharma also teaches the magnetic shield layer is in the form of a plate (par. [0084], lines 2-3).

Regarding to **claim 10**, Sharma discloses all the limitations of claimed invention for the same reasons are set-forth above; in addition, Sharma also teaches the memory device is constructed such that insulating material layer or conductive material layer (reference numeral 250) is sandwiched between said magnetization pinned layer (reference numeral 240) and said magnetic layer (reference numeral 260), that with a magnetic field induced by passing a respective current through wirings provided on the top and the bottom of said memory element, the orientation of magnetization in said

magnetic layer is aligned in a prescribed direction thereby writing information thereto, and that said written information is read out by use of the tunnel magneto-resistance effect between said wirings(par.[0005], lines 15-18).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma

Regarding to **claim 7**, Sharma discloses all the limitations of the claimed invention for the same reasons are set-forth above; however, Sharma does not explicitly

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show memory elements are presented almost all over said package. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dispose memory elements all over said package since it was known in the art that magnetic memory package comprises a plurality of magnetic memory elements almost all over.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:

Claims 3-5, 9 and 11-12 are allowable over the reference of record because none of these reference disclose or can be combine to yield the claimed invention such as recited in claims 3-5, 9 and 11-12.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Response to Applicant's Amendment and Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tram H. Nguyen whose telephone number is (571)272-5526. The examiner can normally be reached on Monday-Friday, 8:30 AM – 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, David Nelms can be reached on (571)272-1787. The fax numbers for all communication(s) is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.



Tram H. Nguyen
Art Unit 2818
March 8th, 2006.



David Nelms
Supervisory Patent Examiner
Technology Center 2800